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U. S. DEPT. OF AGRICULTURE
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CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE.
and
STATE ENGINEER of UTAH

In cooperation with U.S. Forest Service, Bureau of Reclamation,
Utah Fish and Game Dept., Utah Agricultural Experiment Station,
U.S. National Park Service, U.S. Geological Survey; and other
Federal, State, and private organizations.

||||||| AS OF |||||
JAN. 1, 1963

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

To Recipients of Water Supply Outlook Reports:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from advance estimates of the streamflow.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, up to 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1400 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

Streamflow forecasts are obtained by a comparison of total or maximum snow accumulation, as measured by snow water equivalent, to the subsequent spring and summer or snowmelt season runoff over a period of years. The snow water equivalent measured in selected snow courses provides most of the index to the streamflow forecast for the following season. More accurate forecasts are usually obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast procedure. Early season forecasts assume average climatic conditions through the snowmelt season.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions. Soil Conservation Service Reports may be secured from Water Supply Forecasting Unit, Soil Conservation Service, P.O. Box 4170, Portland 8, Oregon.

PUBLISHED BY SOIL CONSERVATION SERVICE

<u>REPORTS</u>	<u>ISSUED</u>	<u>LOCATION</u>	<u>COOPERATING WITH</u>
RIVER BASINS			
WESTERN UNITED STATES	MONTHLY (FEB.-MAY)	PORTLAND, OREGON	ALL COOPERATORS
STATES			
ALASKA	MONTHLY (MAR.-MAY)	PALMER, ALASKA	ALASKA S.C.D.
ARIZONA	SEMI-MONTHLY (JAN.15 - APR.1)	PHOENIX, ARIZONA	SALT R. VALLEY WATER USERS ASSOC. ARIZ. AGR. EXP. STATION
COLORADO AND NEW MEXICO	MONTHLY (FEB.-MAY)	FORT COLLINS, COLORADO	COLO. STATE UNIVERSITY COLO. STATE ENGINEER N. MEX. STATE ENGINEER
IDAHO	MONTHLY (JAN.-JUNE)	BOISE, IDAHO	IDAHO STATE RECLAMATION ENGINEER
MONTANA	MONTHLY (JAN.-JUNE)	BOZEMAN, MONTANA	MONT. AGR. EXP. STATION
NEVADA	MONTHLY (JAN.-MAY)	RENO, NEVADA	NEVADA DEPT. OF CONSERVATION AND NATURAL RESOURCES - DIVISION OF WATER RESOURCES
OREGON	MONTHLY (JAN.-JUNE)	PORTLAND, OREGON	OREG. STATE UNIVERSITY OREGON STATE ENGINEER
UTAH	MONTHLY (JAN.-JUNE)	SALT LAKE CITY, UTAH	UTAH STATE ENGINEER
WASHINGTON	MONTHLY (FEB.-JUNE)	SPOKANE, WASHINGTON	WN. STATE DEPT. OF CONSERVATION
WYOMING	MONTHLY (FEB.-JUNE)	CASPER, WYOMING	WYOMING STATE ENGINEER

PUBLISHED BY OTHER AGENCIES

<u>REPORTS</u>	<u>ISSUED</u>	<u>AGENCY</u>
BRITISH COLUMBIA	MONTHLY (FEB.-JUNE)	WATER RIGHTS BR., DEPT. OF LANDS, FORESTS AND NATURAL RESOURCES, PARLIAMENT BLDG., VICTORIA, B.C., CANADA
CALIFORNIA	MONTHLY (FEB.-MAY)	CALIF. DEPT. OF WATER RESOURCES, P.O. BOX 388, SACRAMENTO, CALIF.

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WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
UTAH

JANUARY 1, 1963

Report prepared by

GREGORY L. PEARSON, Snow Survey Supervisor

and

GARRY DINSDALE, Asst. Snow Survey Supervisor

2 U.S. SOIL CONSERVATION SERVICE //
- 0 SNOW SURVEY SECTION
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SOIL CONSERVATION SERVICE
SALT LAKE CITY, UTAH

DR. D.W. THORNE
DIRECTOR
UTAH AGRICULTURAL
EXPERIMENT STATION
LOGAN, UTAH

WATER SUPPLY OUTLOOK

as of

JANUARY 1, 1963

* A record or near record low snowpack for January 1, now lies *
* on all watersheds of Utah. Most new records are in the north-*
* ern half of the state, which has not experienced as many *
* severe droughts in the last dozen years as southern Utah. The *
* snowpack is 23% of average for the state as a whole. Soil *
* moisture is generally below average. Forecasts of next sum- *
* mer's streamflow now range between 40% and 65% of average for *
* most streams. *

With the snowpack in Utah's mountains ranging from a low of 4% of average on the American Fork river to a high of 54% on Salina Creek, the 1963 water supply outlook is certainly not for a "Bright New Year". The snowpack on most watersheds varies between 15% and 30% of average.

Of the 57 snow courses measured this month, 26 set new record low readings, with most of the remaining courses at or near their previous lows.

If the present drought trend breaks, so that we start getting normal snowfall again, by the first of April the snowpack will have built up until it will be about 55% to 65% of average on the low and intermediate elevation watersheds. Examples of such watersheds are the Little Bear river in Cache Valley, the Strawberry reservoir, the Strawberry, Spanish Fork and American Fork rivers. On the higher elevation watersheds the snowpack will be about 65% to 75%. Included among these are the Logan river, the Weber river above Oakley, the main Uintah Basin streams(excluding the Strawberry river), the tributaries of the San Pitch and San Rafael rivers.

Because of the extended periods of dry weather experienced last summer and fall, soil moisture underneath the snowpack is generally below average. This means that a greater than normal amount of snow water will be required to prime the soil next spring before runoff begins.

Combining snowpack and soil moisture conditions to determine how much water can be expected in the streams next summer, we find forecasts varying from a low 30% of average on the Bear river at Woodruff and Hobbie Creek near Springville, to a high of 74% on the East Fork Sevier river. Most forecasts range between 40% and 65%. These forecasts assume that we will have average snowfall and rain for the rest of the winter and spring months.

In northern Utah the forecasts are for about the same runoff as was experienced in 1960. The outlook is poorer than this for the streams coming from the mountains near Castledale, Ferron and the Mt. Pleasant to Mayfield areas. Here, streams are expected to yield essentially the same water they did two years ago, in 1961.

Examples of forecasts for various areas of the state are as follows: In Cache Valley the Logan river is forecast at 63%, the Blacksmith Fork river at 46%. Moving southward, inflow to Pineview reservoir is expected to be 50%, Chalk Creek at Coalville - 36%, Weber at Oakley - 67%. Near Salt Lake, the Cottonwood Creeks are forecast at 70%, while expected inflow to Utah Lake is 54%, inflow to Strawberry reservoir - 36% and the Provo River at Vivian Park - 47%.

In the Uintah Basin, the Strawberry river is expected to flow at 38%, while the remaining streams are forecast at 60% to 70%. Inflow to Scofield reservoir on the Price river, the tributaries of the San Pitch and San Rafael rivers are all forecast at 40% to 55%.

In southern Utah, forecasts range between 50% and 65% for the streams heading near Cedar Breaks (Sevier, Virgin and smaller streams), as well as the Beaver river, Clear Creek near Sevier and inflow to the Sevier river between Kingston and Vermillion Dam.

While total water stored in the state's reservoirs is 158% of last year at this time, it is only 73% of average. As shown on the reservoir storage page, carryover water supplies compare favorably with average on the Weber-Ogden river system, in Deer Creek, Moon Lake and Scofield reservoirs. It is particularly poor in Sevier Bridge (16% of average) and in Strawberry reservoir (37%).

Since in the average year there is still 60% to 65% of the snowpack yet to come, the water outlook can change considerably - either up or down - as the season progresses. However, because of the present extremely light snowpack, if the irrigation season is to begin with an average water supply outlook, snowfall for the next three months will have to be from about 150% to 165% of average.

RESERVOIR STORAGE (1,000 Ac. Ft.)

BASIN or STREAM	RESERVOIR	USABLE CAPACITY	MEASURED (FIRST OF MONTH)		
			THIS YEAR	LAST YEAR	AVERAGE ^a

GREAT BASIN

<u>Bear River</u>	Bear Lake	1421.0	717.3	479.5	806.4
	Woodruff Narrows	26.5	12.4	- -	- -
<u>Little Bear</u>	Hyrum	15.3	6.9	7.4	9.8
<u>Ogden</u>	Pineview	110.0	53.0	10.6	7.2
<u>Weber</u>	Rockport	59.1	32.3	10.6	- -
	Echo	73.9	24.3	12.5	26.3
	East Canyon	28.7	16.3	2.0	14.1
<u>Provo</u>	Deer Creek	149.7	120.7	49.0	84.8
<u>Spanish Fork</u>	Strawberry	270.0	47.3	16.2	128.6
<u>Utah Lake</u>	Utah Lake (b)	1149.0	205.7	161.8	516.7
<u>Sevier River</u>	Otter Creek	52.5	14.6	12.0	21.6
	Piute	74.0	17.6	14.1	29.6
	Sevier Bridge	236.0	18.8	25.2	120.1
<u>Beaver River</u>	Rocky Ford	23.3	5.7	5.3	11.9

COLORADO RIVER DRAINAGE

<u>Lake Fork</u>	Moon Lake	35.8	12.5(c)	20.3	10.6
<u>Price River</u>	Scofield	65.8	16.9	1.3	13.7

All data contained in this table supplied by the U.S. Geological Survey

(a) 1943-57 average. (b) Active capacity taken at 3.1 feet above compromise point. (c) Partly estimated.

COMPARISON of SNOW COVER

RIVER BASIN or TRIBUTARY WATERSHED	NO. of COURSES AVERAGE	THIS YEARS SNOW WATER EXPRESSED AS PERCENT OF :	
		LAST YEAR	AVERAGE *

GREAT BASIN

Smith's Fork - Bear River	2	23	32
Logan River	3	12	17
Ogden River	4	--	16
Weber River above Echo Dam	6	18	22
East Canyon Creek	3	34	35
Farmington Creek	2	18	29
Salt Lake Area	4	26	27
Tooele Area	1	23	28
American Fork River	3	3	4
Provo River above Vivian Park	7	12	14
Strawberry Reservoir Valley	3	2	5
Payson Creek	2	29	40
Sevier River above Hatch	3	16	12
East Fork Sevier River	3	45	41
Clear Creek above Sevier	1	40	28
Salina Creek	2	48	54
San Pitch River	4	14	18
Coal Creek-Cedar City	3	21	19

COLORADO RIVER BASIN

Duchesne-Strawberry Rivers	6	8	10
Whiterocks - Uintah Rivers	3	13	15
Price River	6	10	12
San Rafael River	2	16	20
Escalante River	3	45	41
Virgin River	4	16	13

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a
GREAT BASIN DRAINAGE							
UPPER BEAR RIVER (Above Harer, Idaho)							
CCC Camp x	10G7	7500	12/27	8	1.6	7.0	4.9
Salt River Summit x	10G8	7900	12/27	11	2.0	8.7	6.2*
Trial Lake x	10J8	9800	12/27	15	2.7	17.3	11.0*
LOWER BEAR RIVER (Below Harer, Idaho)							
Garden City Summit	11H7	7600	12/28	12	2.5	11.8	7.5*
Klondike Narrows	11H1	7400	12/28	6	1.4	10.2	7.2*
Tony Grove R. S.	11H3	6250	12/28	2	0.2	7.5	4.8*
OGDEN RIVER							
Beaver Creek-Skunk Crk.	11H14	7150	12/27	4	0.8	- -	5.5*
Ben Lomond Peak	11H8	8000	12/27	12	2.3	- -	13.5
Ben Lomond(lower)	11H9	5850	12/27	1	0.1	12.9	5.8*
Ben Lomond Trail	11H30	6000	12/27	1	0.1	New Course	
Cutler Creek	11H29	6780	12/27	7	1.5	New Course	
Dry Bread Pond	11H13	8230	12/27	11	2.4	- -	8.0*
Sagebrush Flat	11H15	6300	12/27	Trace	Trace	- -	-
WEBER RIVER							
Beaver Creek R. S.	11J24	7500	12/27	Trace	Trace	6.0	4.1*
Lamb's Canyon x	11J14	6600	12/28	8	1.6	6.2	6.0*
Parley's Canyon Smt.	11J15	7500	12/28	12	2.1	8.7	7.3*
Silver Lake x	11J16	8725	12/29	12	2.3	11.2	11.5
Smith & Morehouse	11J4	7600	12/28	7	1.4	6.6	4.9*
Trial Lake x	10J8	9800	12/27	15	2.7	17.3	11.0*
PROVO RIVER & UTAH LAKE							
Camp Altamont	11J20	7300	12/28	1	0.2	10.9	7.3
Daniels-Strawberry Smt.	11J23	8000	12/28	3	0.6	8.4	5.3
East Portal	11J7	7560	12/28	0	0.0	6.3	4.6*
Payson R. S.	11K1	8050	12/27	12	2.8	8.8	6.0*
Rock Bridge	11K2	6750	12/27	12	1.4	5.4	4.1*
Soapstone R. S.	11J25	7800	12/27	4	0.5	6.6	5.3*
South Fork R. S.	11J19	6100	12/28	0	0.0	4.4	4.1*
Strawberry Divide	11J8	8000	12/28	Trace	Trace	9.1	8.7*
Timpanogos Cave Camp	11J18	5500	12/28	0	0.0	1.1	2.2*
Timpanogos Divide	11J21	8140	12/28	7	0.8	13.6	11.4
Trial Lake	10J8	9800	12/27	15	2.7	17.3	11.0*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

JORDAN RIVER & GREAT SALT LAKE

Farmington Canyon(1)	11J12	6950	12/28	10	2.8	14.4	8.9*
Farmington Canyon(u)	11J11	8000	12/28	14	2.8	16.4	10.4*
Lamb's Canyon	11J14	6600	12/28	8	1.6	6.2	6.0*
Middle Canyon	12J3	7000	12/27	6	1.5	6.4	5.3*
Mill D South Fork	11J10	7400	12/29	10	2.5	7.6	7.6*
Parley's Canyon Smt. x	11J15	7500	12/28	12	2.1	8.7	7.3*
Silver Lake	11J16	8725	12/29	12	2.3	11.2	11.5

UPPER SEVIER RIVER (South of Richfield, Utah)

Bryce Canyon	12M8	8000	12/29	5	0.5	1.7	1.9*
Duck Creek R. S.	12M4	8560	12/28	4	0.4	5.3	5.0*
Harris Flat R. S.	12M5	7700	12/28	2	0.2	3.6	2.5*
Kimberly Mine	12L6	8900	12/28	13	1.9	4.7	6.7*
Long Valley Jct. x	12M6	7500	12/28	3	0.3	2.8	1.0*
Midway Valley	12M2	9800	12/27	12	2.0	6.1	9.7*
Widtsoe-Escalante Smt.	11M1	9500	12/27	7	1.4	3.0	3.2*
Widtsoe-Escalante #2	11M2	9500	12/27	8	1.5	3.8	4.0
Widtsoe-Escalante #3	11M3	9500	12/27	13	2.4	4.9	- -

LOWER SEVIER RIVER (Including San Pitch River)

Beaver Dams	11K13	8000	12/26	12	1.9	6.2	3.9*
Farnsworth Lake	11L1	9900	12/28	17	3.5	8.0	7.4*
G.B.R.C. Headquarters	11K11	8700	12/31	10	1.6	8.4	5.8*
G.B.R.C. Meadows	11K10	10000	12/31	14	2.6	11.9	10.0*
Gooseberry R. S.	11L2	8400	12/28	15	2.8	5.5	4.6*
Gooseberry Reservoir x	11K4	8700	12/27	6	1.0	9.9	7.3*
Mammoth R.S. - Ctnwd.Crk.	11K3	8800	12/27	4	0.5	9.9	7.7*
Mt. Baldy R. S.	11K12	9500	12/26	12	1.9	10.9	9.3*

COAL CREEK

Midway Valley x	12M2	9800	12/27	12	2.0	6.1	9.7*
Urie Flat	12M10	8450	12/27	4	0.4	3.8	1.8*
Webster Flat x	12M3	9200	12/27	8	1.1	5.8	7.6*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.

SNOW

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

COLORADO RIVER DRAINAGE

DUCHESNE RIVER

Daniels-Strawberry Smt.x	11J23	8000	12/28	3	0.6	8.4	5.3
East Portal x	11J7	7560	12/28	0	0.0	6.3	4.6*
Indian Canyon	10K1	9100	12/27	8	0.8	5.7	5.2*
Julius Park	9J6	9800	12/27	7	1.0	7.0	- -
Mosby Mountain	9J5	9500	12/27	6	0.8	5.5	5.0*
Paradise Park	9J3	10100	12/27	5	0.7	6.8	5.7*
Soapstone R. S. x	11J25	7800	12/27	4	0.5	6.6	5.3*
Strawberry Divide x	11J8	8000	12/28	Trace	Trace	9.1	8.7*
Trial Lake x	10J8	9800	12/27	15	2.7	17.3	11.0*

PRICE RIVER

Dry Valley Divide	11K8	7800	12/31	2	0.2	5.2	4.7*
Gooseberry Reservoir	11K4	8700	12/27	6	1.0	9.9	7.3*
Indian Canyon x	10K1	9100	12/27	8	0.8	5.7	5.2*
Jones Ranch	11K7	7600	12/31	2	0.2	3.2	2.6*
Mammoth R.S.- Ctnwd.Crk.x	11K3	8800	12/27	4	0.5	9.9	7.7*
Mud Creek	11K33	8300	12/31	7	1.1	6.1	5.0*

SAN RAFAEL RIVER

G.B.R.C. Meadows x	11K10	10000	12/31	14	2.6	11.9	10.0*
Gooseberry Reservoir x	11K4	8700	12/27	6	1.0	9.9	7.3*
Mammoth R.S.- Ctnwd.Crk.x	11K3	8800	12/27	4	0.5	9.9	7.7*
Mt. Baldy R. S. x	11K12	9500	12/26	12	1.9	10.9	9.3*

FREMONT RIVER

Farnsworth Lake x	11L1	9900	12/28	17	3.5	8.0	7.4*
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MUDDY RIVER

Mt. Baldy R. S. x	11K12	9500	12/26	12	1.9	10.9	9.3*
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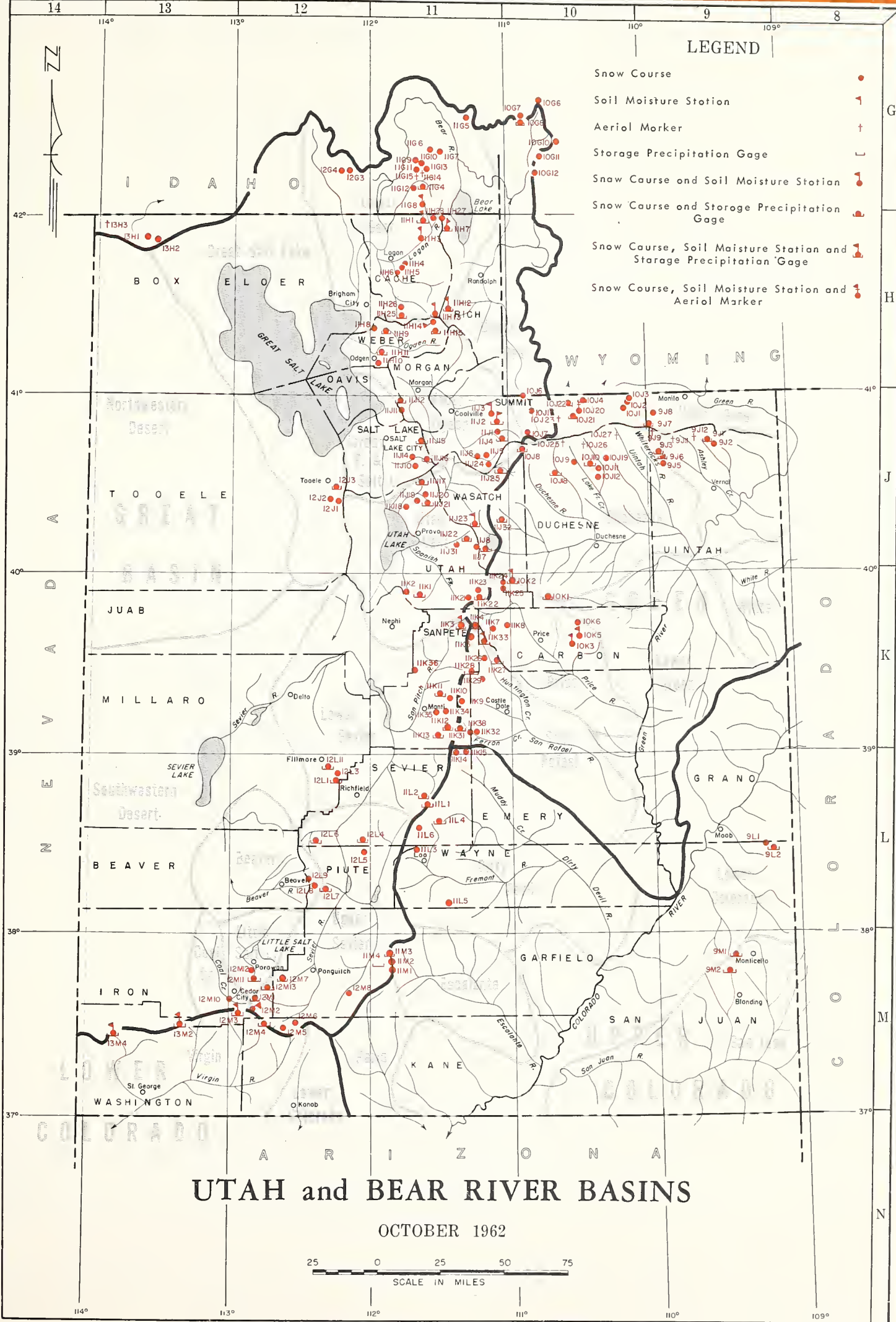
ESCALANTE RIVER

Widtsoe-Escalante Smt.	11M1	9500	12/27	7	1.4	3.0	3.2*
Widtsoe-Escalante #2	11M2	9500	12/27	8	1.5	3.8	4.0*
Widtsoe-Escalante #3	11M3	9500	12/27	13	2.4	4.9	- -

VIRGIN RIVER

Duck Creek R. S.	12M4	8560	12/28	4	0.4	5.3	5.0*
Harris Flat R. S. x	12M5	7700	12/28	2	0.2	3.6	2.5*
Long Valley Junction	12M6	7500	12/28	3	0.3	2.8	1.0*
Midway Valley x	12M2	9400	12/27	12	2.0	6.1	9.7*
Webster Flat	12M3	9200	12/27	8	1.1	5.8	7.6*

(a) 1943-57, 15 year period. (b) Average of all past record. (x) Adjacent drainage. (A) Aerial observation: Water content estimated. * Estimated 1943-57, 15 year average.



INDEX TO UTAH AND BEAR RIVER BASIN

NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.	NO.	STATE	NAME	SEC.	TWP.	RGE.	ELEV.
GREAT BASIN DRAINAGE													
UPPER BEAR RIVER (above Hare, Idaho)													
10011	W	Big Park	7	27N	117W	8700	11114	U	Lamb's Canyon	19	1S	3E	6600
10067	W	CCC Camp x	19	29N	118W	7500	11133F	U	Middle Canyon	8	4S	3E	7000
10077	W	Hayden Fork	1	1S	9E	9200	11110	U	Mill D South Fork	18	2S	3E	7400
10012	W	Kelly Ranger Station	13	26N	118W	8200	11115P	U	Parley's Canyon Summit x	9 & 10	1S	3E	7600
10010	W	Monte Cristo R.S.	4	28N	114W	8820	11116P	U	Rocky Basin-Settlement Canyon	30	2S	3E	8900
10012P	W	Piney Ladarge x	19	29N	118W	8500			Silver Lake (Brighton)	35	2S	3E	8725
1008P	W	Polson Meadows x	29	30N	116W	7900	UPPER SEVIER RIVER (South of Richfield, Utah)						
1008P	W	Salt River Summit x	32	29N	118W	8550	1117P	U	816 Flat x	18	29S	4W	10290
10117P	U	Stillwater Camp	32	2N	10E		1213P	U	Box Creek	33	26S	2W	9800
LOWER BEAR RIVER (below Hare, Idaho)													
11114M	U	Beaver Creek-Skunk Creek	22	8N	3E	7150	1217P	U	87ce Canyon	36	36S	4W	8000
11111	I	Christensen Ranch	27	13S	41E	5600	1218P	U	Cedar Breaks	2	37S	9W	10390
11112	I	Cub River Ranger Station	5	15S	41E	5400	1219P	U	Duck Creek R.S.	11	38S	8W	8560
11114L	I	Dry Basin	30	13S	42E	7900	1219P	U	Fish Lake x	35	26S	1E	8700
11114M	I	Dry Creek	19	8N	4E	8230	1219P	U	Harris Flat	24	38S	5W	7700
1264	I	Dry Creek Flat	31	13S	37E	6350	1219P	U	Kimberly Mine	11	27S	5W	9100
11167	I	Engrat Summit	21	12S	42E	7350	1219P	U	Long Valley Junction x	22	38S	6W	7500
11167	I	Engrat Canyon (mouth)	24	12S	42E	6500	1219P	U	Midway Valley	26	37S	9W	9800
11168M	I	Franklin Basin	1	16S	41E	8000	1219P	U	Panguitch Lake	4 & 5	36S	7W	8200
1117MP	I	Garden City Summit	35	14N	4E	7600	1219P	U	Squaw Springs	3	27S	2W	9300
11175	I	Horseshoe Basin	10	14N	3E	7400	1219P	U	Midsoe-Escalante Summit	22	34S	1W	9500
11175	I	Liberty Springs	7	13S	42E	8200	1219P	U	Midsoe-Escalante #2	22	34S	1W	9500
11175	I	Little Bear (lower)	15	8N	1E	5650	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175P	U	Little Bear (upper)	22	8N	1E	5900	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175P	U	Monte Cristo R.S.	3	8N	4E	8960	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Mt. Logan	3	11N	2E	8600	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Oxford Mountain	32	13S	37E	6600	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Slug Creek Divide	15	10S	44E	7225	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Spring Hollow (lower)	26	12N	3E	8000	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Spring Hollow (upper)	26	12N	3E	8000	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Steep Hollow #1	9	11N	3E	7700	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Steep Hollow #2	9	11N	3E	7700	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Strawberry Creek	14	13S	41E	6800	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Strawberry Mine Divide	14	13S	41E	6800	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Timothy Grove Ranger Station	11	12N	3E	6250	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
11175	I	Willow Flat	2	13S	41E	6100	1219P	U	Midsoe-Escalante #3	22	34S	1W	9500
OGDEN RIVER													
11184M	U	Beaver Creek-Skunk Creek	22	8N	3E	7150	1217P	U	816 Flat	18	29S	4W	10290
11188	U	Ben Leonard Peak	1	7N	1W	8850	1219	U	Merchant's Valley	8 & 9	29S	5W	9300
11188P	U	Ben Leonard (lower)	1	7N	1W	8850	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Dry Creek #2	17 & 20	2N	8E	8000	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Dry Creek #3	17 & 20	2N	8E	8000	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Farmington Canyon (lower) x	14	3N	1E	6950	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Farmington Canyon (upper) x	26	3N	1E	6950	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Farmington Canyon (upper) x	26	3N	1E	6950	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Lamb's Canyon x	19	13S	3E	6600	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Reddon Mine (lower)	9 & 10	1S	3E	7600	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Reddon Mine (upper)	1	2S	6E	8500	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Silver Lake (Brighton) x	35	2S	6E	9000	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Smith & Morehouse	25	1N	7E	7600	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Trail Lake x	5	2S	9E	9300	1219	U	Other Lake	2	29S	5W	9300
PROVO RIVER & UTAH LAKE													
11188P	U	Camp Altamont	29	4S	3E	7300	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Clear Creek Ridge #1	18	11S	6E	9200	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Clear Creek Ridge #2	9	11S	6E	9200	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Clear Creek Ridge #3	27	10S	6E	6600	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Daniels-Strawberry Summit	20	2S	12W	8000	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Dutchman R.S.	27	3S	3E	7560	1219	U	Other Lake	2	29S	5W	9300
11188P	U	East Portal	35	7S	6E	7560	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Hobbs Creek Summit	20	7S	5E	7420	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Packard Canyon	21	7S	5E	6400	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Packard Canyon	30	10S	3E	8050	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Rock Bridge	14	10S	2E	6750	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Soapstone R.S.	9	3S	8E	7800	1219	U	Other Lake	2	29S	5W	9300
11188P	U	South Fork R.S.	34 & 35	7S	2E	6100	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Strawberry Divide	27	4S	2E	8000	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Timpanogos Cave Camp	33	4S	3E	8160	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Timpanogos Divide	33	4S	3E	8160	1219	U	Other Lake	2	29S	5W	9300
11188P	U	Trail Lake	5	2S	9E	9800	1219	U	Other Lake	2	29S	5W	9300
JORDAN RIVER & GREAT SALT LAKE													
1212	U	Bevan's Cabin	24	4S	4W	6450	1017P	I	Clear Creek Meadows	26	14S	14W	9050
11122P	U	Farmington Canyon (lower)	14	3N	1E	6950	1017P	I	One Mile Summit	19	14S	14W	7330
11122P	U	Farmington Canyon (upper)	26	3N	1E	8000	1017P	I	ViPont	17	14S	17W	7650
COLUMBIA RIVER DRAINAGE													
RAFT RIVER													
1312	I	Clear Creek Meadows	26	14S	14W	9050	1312	I	Clear Creek Meadows	26	14S	14W	9050
1313	I	One Mile Summit	19	14S	14W	7330	1313	I	One Mile Summit	19	14S	14W	7330
1313a	I	ViPont	17	14S	17W	7650	1313a	I	ViPont	17	14S	17W	7650
SOUTHEASTERN UTAH DRAINAGES													
9M1P	U	Buckboard Flat	36	3S	22E	9000	9M1P	U	Buckboard Flat	36	3S	22E	9000
9M2P	U	Camp Jackson	22	34S	22E	8600	9M2P	U	Camp Jackson	22	34S	22E	8600
9M3P	U	Lashal Mountain	22	34S	22E	8600	9M3P	U	Lashal Mountain	22	34S	22E	8600
9M4P	U	Lashal Mountain (upper)	3	27S	24E	9400	9M4P	U	Lashal Mountain (upper)	3	27S	24E	9400
LEGEND													
Numbering system (example)													
1017		SNOW COURSE ONLY					1017		SNOW COURSE ONLY				
1017P		SNOW COURSE AND PRECIPITATION GAGE					1017P		SNOW COURSE AND PRECIPITATION GAGE				
1017M		SNOW COURSE AND SOIL MOISTURE STATION					1017M		SNOW COURSE AND SOIL MOISTURE STATION				
1017A		SNOW COURSE AND AERIAL MARKER					1017A		SNOW COURSE AND AERIAL MARKER				
1017MA		SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER					1017MA		SNOW COURSE, SOIL MOISTURE STATION AND AERIAL MARKER				
1017M		SNOW COURSE, SOIL MOISTURE STATION ONLY					1017M		SNOW COURSE, SOIL MOISTURE STATION ONLY				
1017P		AERIAL MARKER ONLY					1017P		AERIAL MARKER ONLY				
1017P		STORAGE PRECIPITATION GAGE ONLY					1017P		STORAGE PRECIPITATION GAGE ONLY				
1017P		ADJACENT DRAINAGE					1017P		ADJACENT DRAINAGE				

Agencies Cooperating in Utah Snow Surveys

U. S. GOVERNMENT AGENCIES

U. S. Department of Agriculture
Soil Conservation Service
Forest Service
U. S. Department of Commerce
Weather Bureau
U. S. Department of Interior
Bureau of Reclamation
Geological Survey
National Park Service

STATE AGENCIES

Utah Agricultural Experiment Station
Utah Fish and Game Department
Utah State Engineer
Little Bear River Commissioner
Price River Commissioner
Provo River Commissioner
Sevier River Commissioner
Spanish Fork River Commissioner
Utah Water and Power Board

MUNICIPALITIES

Manti
Salt Lake City

ORGANIZED PUBLIC AGENCIES

Beaver River Water Users Association
Board of Canal Presidents - Jordan River
Emery Canal and Reservoir Company
Moon Lake Water Users Association
Ogden River Water Users Association
Provo River Water Users Association
Strawberry Water Users Association
Sevier River Water Users Association

PRIVATE AGENCIES

Kaiser Steel Corporation

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